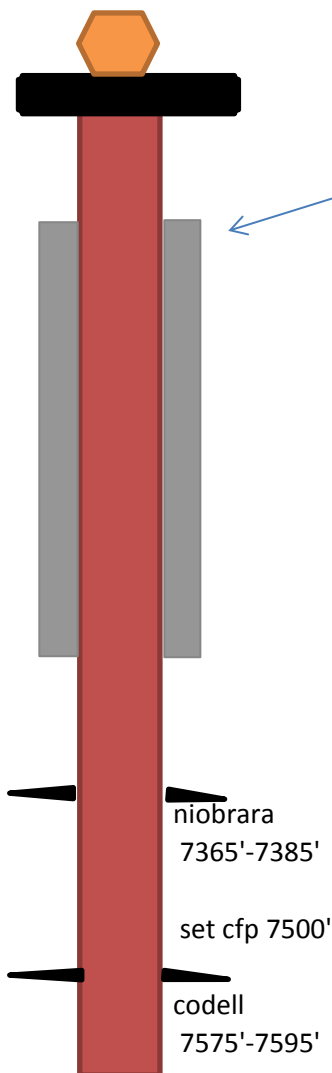


	KPK	
	KP KAUFFMAN CO INC.	
	API#05-123-32751-00	
Well Front Range #11-17-5	SHL: 1505'FSL& 1906'FWL NE/SW	
FORMATION NIOBRARA.	BHL:1953'FNL&699'FWL SW/NW	
7365-7385 4 jspf.	SEC 17 TWP 4N RGE 66W	Pro csg 4.5 11.6#
FORMATION CODELL	K.B 4734	Depth Drilled 7721'
PERFS, 7575'-7595' 4 JSPF,90 DEG PHS.	D.F.4733'	Depth logged 7662'
19 GRAM CHG. .40"EH.40.56"TTP.	G.L. 4722'	SC 713.65
		pro csg landed 7693'
		PBTD 7676'
		Cement Top 2758'



8/27/2011

NEW CODELL FRAC.

MIRUH call for max press 6000 psi kickouts 5800 psi
begin active pad formation break 3647 psi @4.6 bpm
isip 2585 psi 1 min 2375psi 5 min 2122psi leakoff 463 psi
begin FR water pad 762 bbls @4035 psi @ 40.1 bpm.
begin phaser frac pad 119 bbls @4226 psi @39.4 bpm.
pump 1 thru 4 ppg . 249,215# preferred rock 20/40
8,00# SB Excel 20/40 2237.1bblsphaser 2117.2 SLF.
ISIP -3547 PSI PRESS AFTER 5 MIN -3292 PSI.
AVG PRESS 4101 PSI RATE 40.9 BPM.
MAX PRESS 5121 PSI RATE 41.7 BPM
LOAD TO RECOVER 3244.1 BBLs

casing 4 1/2 11.6#

top perms 7575'

capacity 117 bbls

niobrara

7365'-7385'

set cfp 7500'

codell

7575'-7595'

rig up jw wireline set a halliburton

obsidian cfp 3.66@7500' perf

niobrara @ A bench 7274'-7276'. 4 JSPF

7365'-7385' 4 jspf.

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FRONT RANGE 11-17-5
NIOBRARA FRAC 8/27/2011

- 1 Open well 2289 psi on well begin active pad formation
break 4742 psi isip 3664 psi 1 min 3419 psi 5 min 3275 psi
 - 2 pumped 119 bbls begin FR water pad pump 1429 bb bbls leakoff 389 psi
@ 50.7 bpm 4356 psi.
 - 3 begin pHaser frac pad pump 143 bbls@50.1 bpm@ 4380 psi.
 - 4 begin pHaser frac pump 167 bbls 7000 # 30/50 1 ppg at 4500 psi.
 - 5 begin phaser frac pump 786 bbls 66000 # 30/50 2ppg @50.0 bpm/4486 psi
 - 6 begin phaser frac pump 524 bbls 66000 # 30/50 3 ppg @ 50.1 at 4302 psi
 - 7 begin phaser frac pump 310 bbls 39000 # 30/50 3 ppg@ 50.0 bpm at 4400 psi.
 - 8 begin phaser frca pump 238 bbls 4000# 30/50 4 ppg @50.2 bpm at 4395 psi.
 - 9 begin phaser frac pump 143 bbls 24000 # 30/50 4ppg 50.0 bpm at 4329 psi.
 - 10 begin phaser frac pump 48 b bls 8000 # SB Ecel 20/40 4 ppg @ 49.9 bpm.
 - 11 Flush 119 bbls. 50.0 bpm@4680 psi.
- ISIP 3546 PSI
5 MIN .3296 PSI SHUT WELL IN.
AVG PRESS 4451 PSI RATE 50.1 BPM
MAX PRESS 5024 PSI RATE 50.9 BPM.
Ppumped 245,011# 30/50 ottawa 8,000 # SB Excel 20/40 sand
117.3 BBLS ACIVE FLUID PAD
2377.5 BBLS PHASER.
2232.5 BBLS SLF.
LOAD TO RECOVER 4095.7 BBLS.